



Calocerinos & Spina
CONSULTING ENGINEERS

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December 18, 1984

Mr. Roy Thielkin
 Project Manager
 Facility Permitting Unit
 Southern California Section
 Toxic Substances Control Division
 Department of Health Services
 107 South Broadway, Room 7128
 Los Angeles, California 90012

Re: Site Assessment Plan
 Trent Tube Plant
 Fullerton, California
 CAD 008325110

File: 469.003

Dear Mr. Thielkin:

In accordance with Mr. Hinton's letter of December 3, 1984, and our discussion during the meeting in your office on December 14, 1984, we are hereby submitting a Site Assessment Plan for the Trent Tube Division Plant at 2100 East Orangethorpe Avenue, Fullerton, California.

As you will note, we anticipate performing the site borings during the period of December 26-28, 1984. We would therefore appreciate receiving your comments at the earliest possible time.

Please feel free to call us if you have any questions or need additional information.

Very truly yours,

CALOCERINOS & SPINA

Richard W. Klippel, P.E.
 Industrial Waste Manager

RWK:mts

Enclosure

CC: W. Smith, Esq. (w/ enc.)
 Mr. D. Bramwell, IT Corp. (w/enc.)
 Mr. R. Phillips, Trent Tube (w/enc.)
 Mr. J. Devaney, Colt Industries

OK RT
 12/21/84

SITE ASSESSMENT PLAN
TRENT TUBE DIVISION PLANT
2100 EAST ORANGETHORPE AVENUE
FULLERTON, CALIFORNIA
CAD 008325110

I. Background Information

Trent Tube Division of Crucible Material Corporation ceased operation of their manufacturing facility at 2100 East Orangethorpe Avenue, Fullerton, California, on March 11, 1984. In accordance with Article 4, para. 66402, of the California Waste Management Regulations, notice of the anticipated closure along with a Closure Plan and cost estimate plus a copy of the Operation Plan were submitted to the California Department of Health Services by certified letter on August 24, 1983. No comments on that submittal were received.

From March 28-30, 1984, Mr. Richard W. Klippel, P.E., of Calocerinos & Spina, Consulting Engineers, and Robert Phillips of Trent Tube inspected the Plant and assisted Mr. Harry Murphy, Plant Manager, in updating and revising the Closure Plan and cost estimate. On March 29, 1984, Mr. Klippel and Mr. Phillips met with Mr. Kurt Burchtold of the Santa Ana Regional Water Quality Control Board to discuss the pending Plant closure and submittal of the notice and revised Closure Plan. Mr. Burchtold advised Trent Tube to submit the Plan to both the Water Quality Control Board and the California Department of Health Services for review.

On April 1, 1984, in accordance with provisions of Attachment A, Section V, of the Interim Status Document, CAD 008325110, the Revised Closure Plan and cost estimate were submitted by certified letter to the Santa Ana Regional Water Quality Control Board. As per Mr. Burchtold's

recommendation, a copy of the Plan was sent to the Department of Health Services. That Closure Plan identified the actual closure date of May 11, 1984.

On May 4, 1984, Trent Tube received a copy of a memo from the Regional Water Quality Control Board to the Department of Health Services referring closure approval for the facility to the Department of Health Services.

In that memo, the Regional Water Quality Board stated that no problems were noted during their inspection of the facility or in their review of the Closure Plan, with one exception. That exception involved small areas of soil contaminated with waste oil which were noted on the south side of the Plant during their inspection. Their memo notes that the Plant Manager, Mr. Harry Murphy, stated that, during closure, the soil in these areas would be removed to a depth of three (3) feet.

On May 11, 1984, Trent Tube ceased manufacturing at the facility and during the remainder of the month, closure activities as described in the Closure Plan were carried out under the supervision of Mr. Harry Murphy. As agreed in his meeting with the Regional Water Quality Control Board staff, the two small areas of soil stained by waste oil were excavated to a depth of three (3) feet and the excavations were filled with clean crushed stone.

On August 16, 1984, Mr. Richard Klippel under the direction of Mr. Frank Spina, California P.E. #39026, Partner, Calocerinos & Spina, Consulting Engineers, inspected the vacant and closed facility and reviewed photographs, manifests and billing records pertaining to the closure activities. On August 29, 1984, Mr. Frank Spina on the basis of Mr. Klippel's inspection, certified by letter that the facility was closed in accordance with the Closure Plan dated April 1, 1984.

II. Purpose of Plan Submitted

On December 12, 1984, the appropriate Trent Tube personnel received a letter dated December 3, 1984, from the California Department of Health Services, Facility Permitting Unit, advising the company that the Closure Plan was inadequate and the subsequent closure certification inappropriate. The letter directed that a written Site Assessment Plan, prepared by an independent engineer registered in the State of California, be submitted to their office by December 15, 1984. The letter further stated that the Plan must provide for sampling and chemical assessment of all areas which were excavated at the direction of the Regional Water Quality Control Board and all other areas that could be contaminated with hazardous wastes. The Plan must identify all principals, including the analytical laboratory, and all other contractors used. The Plan should also include drawings, sketches and/or photographs necessary to fully describe areas of concern and should propose remedial actions that would be taken if found to be necessary.

On December 14, 1984, officials of Trent Tube, Calocerinos & Spina, Consulting Engineers, and Wayne Smith, Esq., of Gibson, Dunn and Crutcher, Attorneys, met with Mr. Roy Thielkin of the Facility Permitting Unit staff and discussed the matter in some detail. At that meeting, it was agreed that Trent Tube would proceed with the submittal of the Site Assessment Plan and the subsequent execution of the activities upon Plan approval. Since Trent Tube has a purchase offer for the property and considers time to be of the essence, they requested that Mr. Thielkin publish the required public notice at the earliest opportunity. Furthermore, it was agreed that Trent Tube would attempt to complete the site evaluation procedure to the Department's satisfaction prior to the expira-

tion of the required 45-day public comment period. Thus, by approximately February 1, 1985, closure certification could be accomplished thereby allowing closing on the sale of the property.

This Site Assessment Plan is submitted in response to the December 3, 1984, letter request by the Department of Health Services and is specifically tailored to provide the information requested in that letter.

III. Goals of the Site Assessment Plan

The goal of the proposed Site Assessment Plan is to ascertain the presence of hazardous waste constituents in the soil at the Trent Tube facility and to recommend and implement necessary remediation if such materials are found to be present.

IV. Specific Location To Be Assessed

The initial site locations to be assessed are shown as locations A-1, A-2 and A-3 in Figure 1, attached, and are shown pictorially in Figures 2 and 3. The locations shown are those which were excavated at the direction of the Regional Water Quality Control Board. These areas are in close proximity to each of the diked areas where hazardous substances and/or hazardous wastes were stored and represent areas where previous excavation was carried out to remove soil which was visibly stained with oily substances. Specific sample sites in each area were selected to characterize those areas which were visibly contaminated and are generally located near the diked areas and opposite the locations of the dike drains which were periodically opened to remove trapped rainwater from the diked areas.

V. Assessment Procedure

At each of those locations shown in Figure 1 (A-1, A-2 and A-3), it is proposed that soil samples be obtained utilizing a 2-inch diameter

Modified California Sampler. Samples would be collected at three depths at each location. The upper depth would be at the top layer of soil directly beneath the recent excavation which would be approximately 3 feet deep. Additional samples at each location would be obtained at depths of 5 feet and 10 feet. Recent structural borings in the Plant yard confirm a thick layer of sand beneath the site with a water depth of greater than 25 feet.

Samples at each location would consist of a 6-inch long undisturbed soil sample contained within a capped section of 2-inch pipe. The sampling rig would be thoroughly decontaminated between samples and boring holes will be filled with a bentonite clay slurry upon completion.

Samples would be shipped in the sample collection cylinder and refrigerated until analysis. Samples would be delivered to the analytical laboratory on the same day and analyzed within 72 hours of collection. Each sample would be analyzed for the following constituents which were present in the hazardous wastes stored in the adjacent storage areas.

<u>Waste</u>	<u>Target Parameter</u>	<u>Method</u>
Chlorothene VG	1,1,1,Trichlorothane	GC - USEPA Method 601
Blended Solvents	Methylene Chloride	GC - USEPA Method 601
Mineral Spirits		
and Kerosene	Benzene, Toluene, Xylene	GC - USEPA Method 602

Results will be reported in terms of mg/kg (wet weight) as received.

To establish background concentrations in the area, additional samples at the same approximate depths will be taken in three (3) other

locations on the Plant site remote from the waste storage areas. These additional locations are labelled B-1, B-2 and B-3 on Figure 1. These nine samples would be analyzed for the same parameters.

In the interest of time, it is proposed that additional soil samples be collected at downgradient locations at increasing distances from the waste storage areas in order to determine the areal extent of any contamination that might be found. Such samples would be taken at the 3, 5 and 10-foot depths but would only be analyzed if significant contamination were found to exist in the initial set of samples (A-1, A-2 and A-3) adjacent to the waste storage areas. Analyses of these samples would be carried out within 14 days of collection and these samples would be kept refrigerated during the intervening period.

Analytical results of the A-1, A-2 and A-3 samples will be evaluated and compared against the analyses of the background samples (B-1, B-2 and B-3) at comparable depths. If the contaminants are found to exist in the A series samples in concentrations statistically higher than in the background (B series) samples, the same analyses would be performed on the samples taken at a greater distance from the storage areas (C series). If contamination is found in the C series samples, the D series of samples taken near the property line will be analyzed. The composite set of analytical results will then be utilized to determine the areal extent of any remediation that may be required. Such remediation, depending upon the nature and extent of any contamination found, may include either removal of contaminated soil to a secure disposal site or surface spreading and natural volatilization of the contaminants.

The results of the assessment including all analytical data, chain-of-custody sheets, maps and sketches as well as recommendations arising

from the assessment will be documented in a Site Assessment Report which will be promptly submitted to the Department of Health Services.

VI. Principals Involved In the Assessment Process

Certified Independent Engineer	- Frank J. Spina, Calif. P.E. #39026
Principal Site Coordinator	- Andrew F. Diefendorf, CPG (C&S)
Drilling Company	- Pioneer Drilling Company Redlands, Calif.
Analytical Laboratory	- California Analytical Services Sacramento, California
Soil Sampling	- Mr. David Bramwell, CEG IT Corporation, Irvine, California
Data Evaluation	- Richard W. Klippel, P.E. (C&S)

VII. Projected Date of Assessment Effort

1. Submit Assessment Plan	- December 19, 1984
2. Obtain Boring Samples	- December 26, 27 and 28, 1984
3. Analysis of Samples	- December 27-28, 1984
4. Evaluation of Results	- January 2-15, 1985
5. Submittal of Assessment Plan	- January 15, 1985
6. Remediation of Site, if necessary	- January 15-30, 1985

Respectfully submitted,

CALOCERINOS & SPINA



Frank J. Spina 12/18/84
Frank J. Spina, P.E.
Partner

FJS:RWK:mts

Attachments

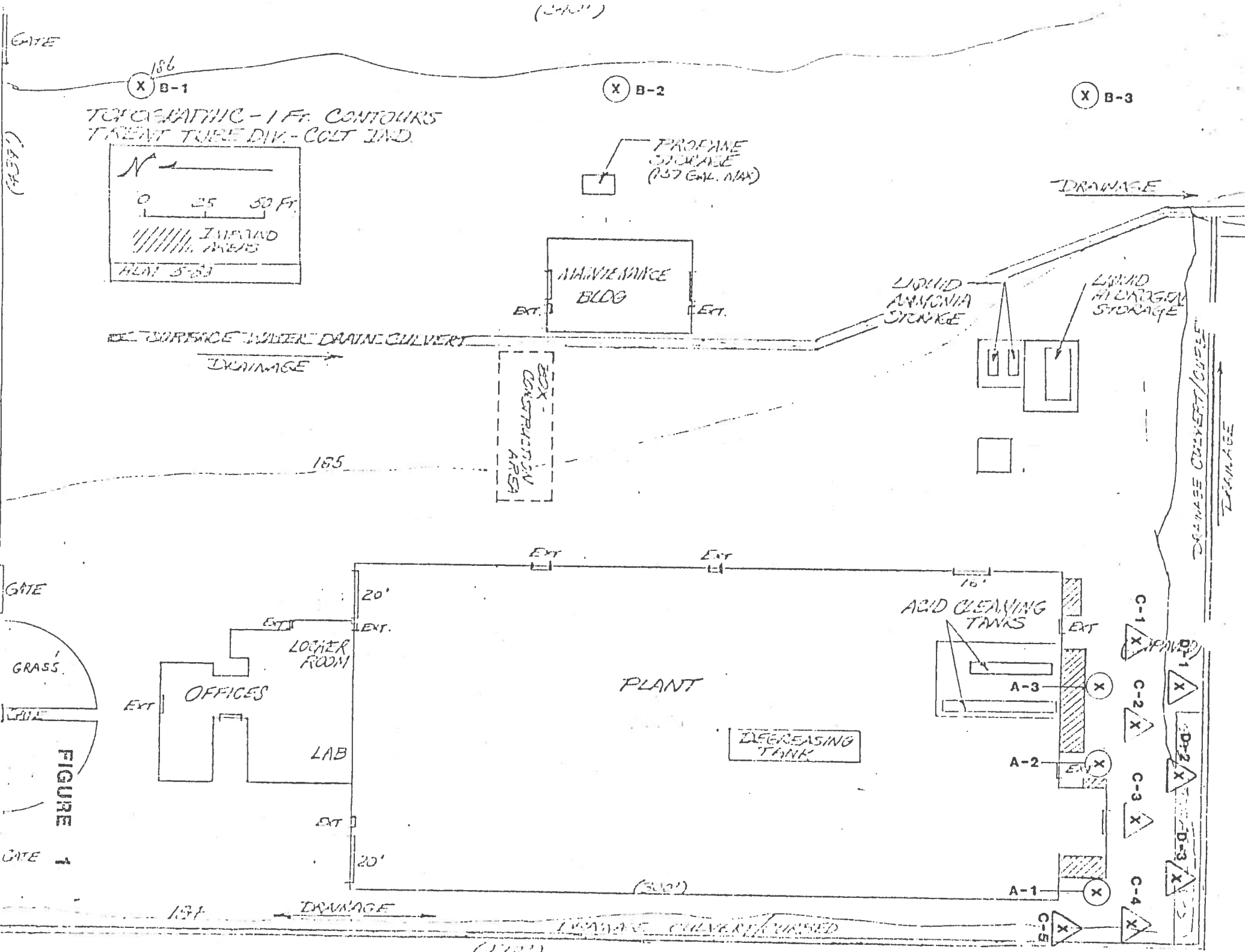


FIGURE 1

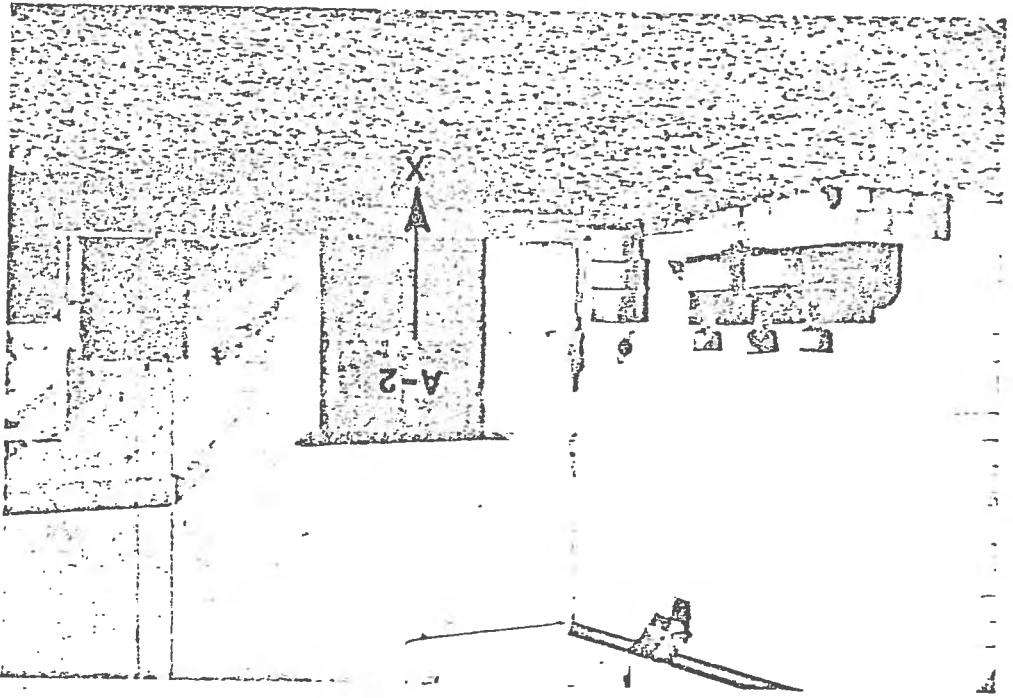


Figure 5 - Waste collection impoundment at south end of facility. Impounded drums contain waste 1,1,1 trichloroethane, waste kerosene, and waste mineral spirits.

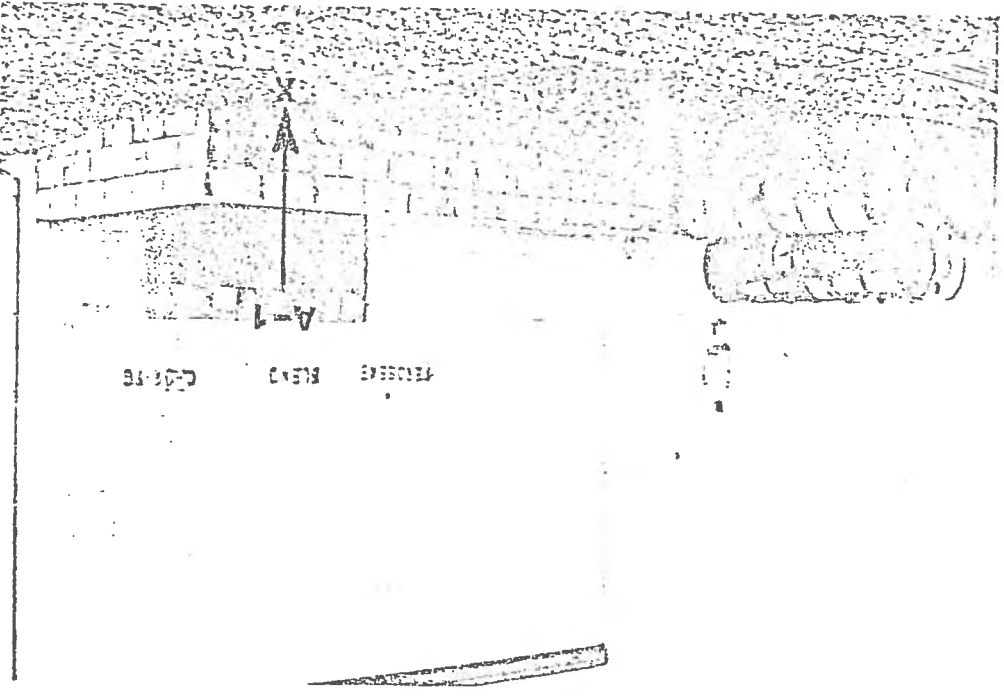


Figure 6 - Waste storage impoundment at southwest corner of plant. Non-impounded drums are empty.

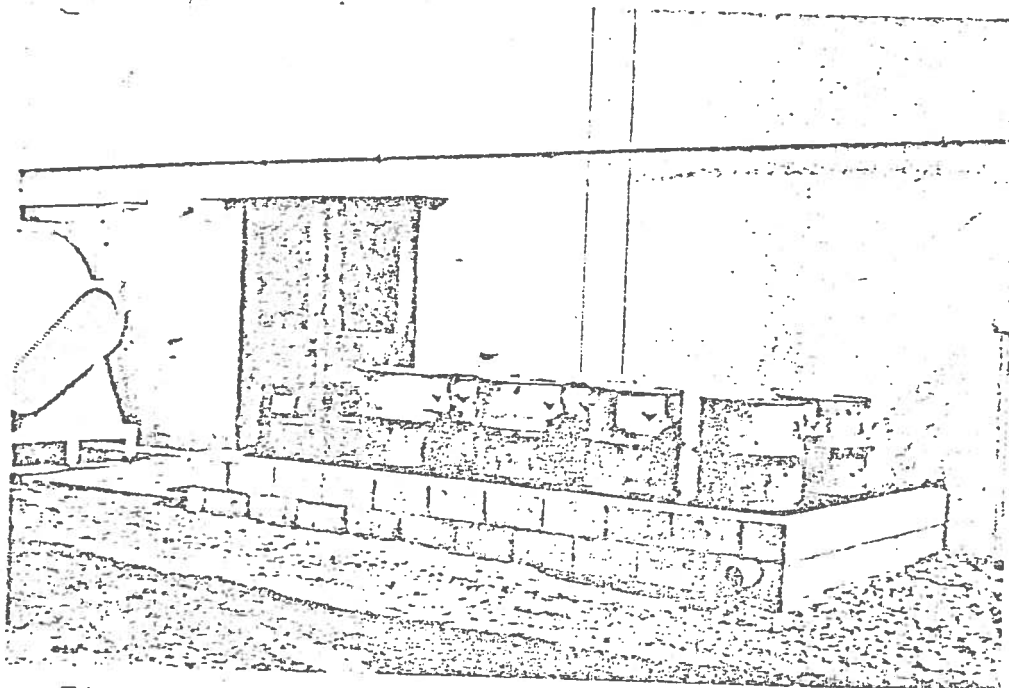


Figure 3 - Impound located at southeast corner of the plant used to store concentrated acids.

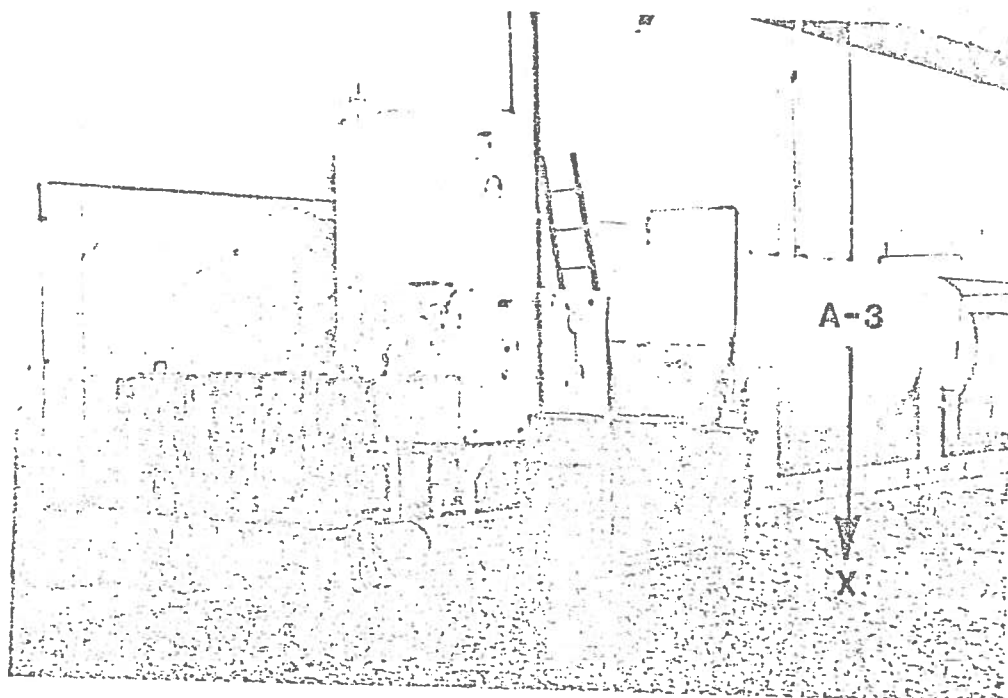


Figure 4 - Impound located at south end, center of plant. Tanks from left to right, store waste oil, waste detergent, unused 1,1,1 trichloroethane, kerosene and 1,1,1 trichloroethane. Drums contain kerosene to be stored in the kerosene tank.